

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
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Complete if Known

Application Number	09/801,360
Filing Date	03/06/2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2624
Examiner Name	Wenpeng Chen

Sheet 1 of 8 Attorney Docket Number 074451.P127D4

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
Wen	us	3,580,655	359/28	5/25/1971	Leith et al.	
	us	3,950,103	356/450	4/13/1976	Schmidt-Weinmar	
	us	4,136,954	356/456	1/30/1979	Jamieson	
	us	4,155,097	375/240.24	5/15/1979	Lux	
	us	4,190,861	375/240.24	2/26/1980	Lux	
	us	4,223,354	348/174	9/16/1980	Noble et al.	
	us	4,393,456	108/316	7/12/1983	Marshall, Jr.	
	us	4,437,087	341/151	3/13/1984	Petr	RECEIVED APR 13 2004
	us	4,569,075	704/103	2/4/1986	Nussbaumer	Technology Center 2600
	us	4,599,567	324/176.33	7/8/1986	Gouillaud et al.	
	us	4,652,881	342/160	3/24/1987	Lewis	
	us	4,663,660	370/240.1	5/5/1987	Fedele et al.	
	us	4,674,125	382/130.3	6/16/1987	Carlson et al.	
	us	4,701,006	359/19	10/20/1987	Perlmutter	
	us	4,751,742	382/240	6/14/1988	Meeker	
	us	4,760,563	367/73	7/26/1988	Beylkin	
	us	4,785,348	375/240.21	11/15/1988	Fonsalas et al.	
	us	4,785,349	375/240.23	11/15/1988	Keith et al.	
	us	4,799,179	208/313	1/17/1989	Masson et al.	
	us	4,805,129	908/300	2/14/1989	David	
	us	4,815,023	708/301-352-43	3/21/1989	Arbeiter	
	us	4,817,182	382/248-302-323	3/28/1989	Adelson et al.	
	us	4,821,223	908/308	4/11/1989	David	
	us	4,827,336	375/240.01	5/2/1989	Acampora et al.	
	us	4,829,378	375/240.11	5/9/1989	Le Gall	
	us	4,837,517	324/339	6/6/1989	Barber	
	us	4,839,889	370/210	6/13/1989	Gockler	
	us	4,858,017	382/240	8/15/1989	Torbev	
	us	4,864,398	348/143	9/5/1989	Avis et al.	
	us	4,868,868	704/105	9/19/1989	Yazu et al.	
	us	4,881,075	341/187	11/14/1989	Weng	
	us	4,894,713	375/240.2	1/16/1990	Delogne et al.	
	us	4,897,717	375/240.07	1/30/1990	Hamilton et al.	
	us	4,899,147	341/160	2/6/1990	Schiavo et al.	
	us	4,904,073	359/1851	2/27/1990	Lawton et al.	
	us	4,918,524	375/240.11	4/17/1990	Ansari et al.	
	us	4,922,544	382/166	5/1/1990	Stansfield et al.	
	us	4,929,223	493/56	5/29/1990	Walsh	
	us	4,929,946	341/187	5/29/1990	O'Brien et al.	
	us	4,936,665	359/1565	6/26/1990	Whitney	
	us	4,973,961	341/151	11/27/1990	Chamzas et al.	
	us	4,974,187	908/420	11/27/1990	Lawton	
Wen	us	4,982,283	375/240.12	1/1/1991	Acampora	

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Sheet 2 of 8 Attorney Docket Number 074451.P127D4

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Examiner Name	Wenpeng Chen

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
WEN	us- 4,985,927	291740		1/15/1991	Norwood et al.	
↑	us- 4,987,480	348/396.1		1/22/1991	Lippman et al.	
	us- 4,999,705	348/412.1		3/12/1991	Puri	
	us- 5,000,183	600/437		3/19/1991	Bonnefous	
	us- 5,001,764	382/145		3/19/1991	Wood et al.	
	us- 5,014,134	382/240		5/7/1991	Lawton et al.	
	us- 5,018,210	382/145		5/21/1991	Merryman et al.	RECEIVED APR 13 2004
	us- 5,049,992	348/443		9/17/1991	Citta et al.	
	us- 5,049,993	348/448		9/17/1991	Le Gall et al.	
	us- 5,068,911	382/240		11/26/1991	Resnikoff et al.	Technology Center 2600
	us- 5,072,308	358/426.02		12/10/1991	Lin et al.	
	us- 5,073,964	382/277		12/17/1991	Resnikoff	
	us- 5,081,645	305/146		1/14/1992	Resnikoff et al.	
	us- 5,095,447	382/144		3/10/1992	Manns et al.	
	us- 5,097,261	341/151		3/17/1992	Langdon, Jr. et al.	
	us- 5,097,331	305/240.11		3/17/1992	Chen et al.	
	us- 5,101,280	382/239		3/31/1992	Moronaga et al.	
	us- 5,101,446	382/248		3/31/1992	Resnikoff et al.	
	us- 5,103,306	348/400.1		4/7/1992	Weiman et al.	
	us- 5,109,451	382/166		4/28/1992	Aono et al.	
	us- 5,121,191	348/443		6/9/1992	Cassereau et al.	
	us- 5,124,930	702/76		6/23/1992	Nicholas et al.	
	us- 5,128,757	305/240.01		7/7/1992	Citta et al.	
	us- 5,128,791	348/469		7/7/1992	Le Gall et al.	
	us- 5,148,498	382/248		9/15/1992	Resnikoff et al.	
	us- 5,152,953	266/252		10/6/1992	Ackermann	
	us- 5,156,943	430/193		10/20/1992	Whitney	
	us- 5,173,880	367/73		12/22/1992	Duren et al.	
	us- 5,182,645	348/458		1/26/1993	Breeuwer et al.	
	us- 5,223,926	305/240.01		6/29/1993	Stone, et al.	
	us- 5,235,434	358/1448		8/10/1993	Wober	
	us- 5,241,395	358/426.14		8/31/1993	Chen	
	us- 5,262,958	702/75		11/16/1993	Chui et al.	
	us- 5,276,525	382/245		1/4/1994	Gharavi	
	us- 5,315,670	382/240		5/24/1994	Shapiro	
	us- 5,321,776	382/240		6/14/1994	Shapiro	
	us- 5,335,016	305/240.03		8/2/1994	Nakagawa	
	us- 5,347,479	908/400		9/13/1994	Miyazaki	
	us- 5,349,348	341/151		9/20/1994	Anderson et al.	
↓	us- 5,379,355	382/238		1/3/1995	Allen	
	us- 5,381,145	341/107		1/10/1995	Allen et al.	
	us- 5,384,869	382/240		1/24/1995	Wilkinson et al.	
WEN	us- 5,412,741	382/232		5/2/1995	Shapiro	

WENPENG CHEN

Wenpeng Chen

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					Complete if Known
					Application Number 09/801,360
					Filing Date 03/06/2001
					First Named Inventor: Edward L. Schwartz
					Art Unit 2624
					Examiner Name Wenpeng Chen
Sheet	3	of	8	Attorney Docket Number	074451.P127D4
U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
<i>Wen</i>	us-	5,414,780 382/276	5/9/1995	Carnahan	
<i>A</i>	us-	5,416,604 382/232	5/16/1995	Park	
	us-	5,420,891 375/350	5/30/1995	Akansu	
	us-	5,453,945 968/400	9/26/1995	Tucker et al.	
	us-	5,455,874 382/251	10/3/1995	Ormsby et al.	
	us-	5,481,308 375/240,11	1/2/1996	Hartung et al.	
	us-	5,495,292 375/240,02	2/27/1996	Zhang et al.	
	us-	5,497,435 382/249	3/5/1996	Berger	
	us-	5,511,151 358/1,15	4/23/1996	Russell et al.	
	us-	5,534,925 348/384,1	7/9/1996	Zhong	
	us-	5,537,493 382/240	7/16/1996	Wilkinson	
	us-	5,541,594 341/51	7/30/1996	Huang et al.	
	us-	5,442,458 382/247	8/15/1995	Rabbani et al.	
	us-	5,546,477 382/242	8/13/1996	Knowles et al.	
	us-	5,563,960 382/239	10/8/1996	Shapiro	
	us-	5,566,089 358/1,15	10/15/1996	Hoogenboom	
	us-	5,602,589 375/240,11	2/11/1997	Vishwanath et al.	
	us-	5,631,977 382/239	5/20/1997	Koshi	
	us-	5,638,498 358/1,18	6/10/1997	Tyler et al.	
	us-	5,657,085 348/398,1	8/12/1997	Katto	
	us-	5,701,367 382/239	12/23/1997	Koshi et al.	
	us-	5,717,789 382/254	2/10/1998	Anderson, et al.	
	us-	5,754,793 709/247	5/19/1998	Eom et al.	
	us-	5,808,683 375/240,11	9/15/1998	Tong et al.	
	us-	5,809,176 382/247	9/15/1998	Yajima	
	us-	5,850,482 382/232	12/15/1998	Meany et al.	
	us-	5,867,602 382/248	2/2/1999	Zandi et al.	
	us-	5,880,856 358/426,11	3/9/1999	Ferriere	
	us-	5,966,465 382/232	10/12/1999	Keith et al.	
	us-	6,020,975 358/1,16	2/1/2000	Chen et al.	
	us-	6,026,198 382/247	2/15/2000	Okada	
	us-	6,088,062 348/141	7/11/2000	Kanou et al.	
	us-	6,101,279 382/240	8/8/2000	Nguyen et al.	
	us-	6,118,902 382/240	9/12/2000	Knowles	
	us-	6,121,970 715/760	9/19/2000	Guedalia	
	us-	6,128,413 382/251	10/3/2000	Benamara	
	us-	6,160,846 375/240,05	12/12/2000	Chiang	
	us-	6,201,897 B1 382/246	3/13/2001	Nixon	
	us-	6,229,929 B1 382/268	5/8/2001	Lynch et al.	
	us-	6,236,765 B1 382/276	5/22/2001	Archarya	
	us-	6,237,010 B1 715/502	5/22/2001	Hui et al.	
	us-	6,263,109 B1 382/232	7/17/2001	Ordentlich et al.	
	us-	6,263,120 B1 382/300	7/17/2001	Matsuoka	

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8/16/06

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Sheet 4

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8

Attorney Docket Number

09/801,36

Application Number 09/801,360

03/06/2001

First Named Inventor: Edw

Edward I

Art Unit

2624

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U.S. PATENT DOCUMENTS

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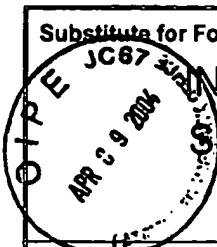
Examiner Signature	WENPENG CHEN PRIMARY EXAMINER <i>Wenpeng Chen</i>	Date Considered	8/16/04
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Sheet 5 of 8 Attorney Docket Number 074451.P127D4

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Application Number	09/801,360
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First Named Inventor:	Edward L. Schwartz
Art Unit	2624
Examiner Name	Wenpeng Chen

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY			
		EPO 0510933 A1	10/28/1992	Canon Kabushiki Kaisha		
	A	EPO 0593013 A2	4/20/1994	Kabushiki Kaisha Toshiba		RECEIVED
		EPO 0611051 A1	8/17/1994	Canon Kabushiki Kaisha		APR 13 2004
		EPO 0622741 A2	11/2/1994	Klips, Ltd.		
		EPO 0967556 A2	12/29/1999	Hewlett-Packard Co.		
		EPO 1035511 A2 506T 9/00	9/13/2000	Canon Kabushiki Kaisha		
		EPO 1164781 A1 H04N 1/393	12/19/2001	Matsushita Electric Ind. Co., Ltd		Technology Center 2600
		EPO 701375 A2	3/13/1996	Xerox Corporation		
		JP 06-245077	9/2/1994	Nec Corp.		
		JP 406038193 A	7/17/1992	Casio Computer Co. Ltd.		
		JP 6-350989	12/22/1994	Fuji Photo Film Co. Ltd.		
		JP 7-79350	3/20/1995	Fuji Photo Film Co. Ltd.		
		PCT WO 00/49571	8/24/2000	Digital Accelerator Corp.		
		PCT WO 01/16764 A1	3/8/2001	Rimage Inc.		
		PCT WO 88/10049	12/15/1988	Eastman Kodak Co.		
		PCT WO 91/03902	3/21/1991	Aware, Inc.		
		PCT WO 91/18361	11/28/1991	Yale University		
		PCT WO 93/10634	5/27/1993	General Electric Co.		
		PCT WO 94/17492	8/4/1994	David Sarnoff Research Ctr., Inc.		
		PCT WO 94/23385 G06F 15/32 10/13/1994	10/13/1994	Lewis, Adrian		
		PCT WO 95/19683 H04N 7/26 7/20/1995	7/20/1995	Houston Advanced Research Ctr.		
		PCT WO 96/09718	3/28/1996	Houston Advanced Research Ctr.		
		UK GB 2 211 691 A H04N 7/13 7/5/1989	7/5/1989	Hitachi Ltd.		
		UK GB 2 284 121 A H04N 7/26 5/24/1995	5/24/1995	State of Israel- Ministry of Defence		
		UK GB 2 285 374 A H03M 7/40 7/5/1995	7/5/1995	Ricoh Company Ltd.		
		UK GB 2 293 733 A H03M 7/30 4/3/1996	4/3/1996	Ricoh Company Ltd.		
		UK GB 2 293 734 A H03M 7/30 4/3/1996	4/3/1996	Ricoh Company Ltd.		
		UK GB 2 303 030 A H03M 7/30 2/5/1997	2/5/1997	Ricoh Company Ltd.		
		UK GB 2 303 031 A H03M 7/30 2/5/1997	2/5/1997	Ricoh Company Ltd.		
		UK GB 2 341 035 A H04N 7/26 3/1/2000	3/1/2000	Ricoh Company Ltd.		

Examiner Signature	WENPENG CHEN <i>Wenpeng Chen</i>	Date Considered	8/16/04
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

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Sheet 6 of 8 Attorney Docket Number 074451.P12714 Technology Center 2600

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
WEN	✓	ANTONINI, et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol 1, No. 2, April 1992, pp. 205-220.	
	✓	BLUMBERG, et al., "Visual Realism and Interactivity for the Internet", IEEE, 1997, pp. 269-273.	
	✓	BOLIEK, et al., "Decoding compression with reversible embedded wavelets (CREW) codestreams", <u>Journal of Electronic Imaging</u> , July 1998, vol. 7 (3), pp. 402-409.	
	✓	BOLIEK, et al., "JPEG 2000 for Efficient Imaging in a Client/Server Environment", <u>Proceeding of the PIE, SPIE, Bellingham, VA, US, Vol. 4472, July 31, 2001</u> , pp. 212-223, XP008010308.	
	✓	BOLIEK, et al., "JPEG 2000 Next Generation Image Compression System", IEEE 0-7803-6297, 45-48.	
	✓	CALDERBANK, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.	
	✓	CAREY, et al: "Regularity-Preserving Image Interpolation", <u>IEEE Transactions on Image Processing</u> , Vol. 8., No. 9, September 1999, pgs. 1293-1297, XP002246254.	
	✓	CARRATO, et al: "A Simple Edge-Sensitive Image Interpolation Filter", <u>Proceedings of the International Conference on Image Processing (ICIP) Lausanne, Sept. 16-19, 1996, New York, IEEE, US, vol. 1</u> , pgs. 711-714, XP010202493.	
	✓	CHEN, et al., "Wavelet Pyramid Image Coding with Predictable and Controllable Subjective Picture Quality", <u>IEICE Trans. Fundamentals</u> , Vol. E76-A., No. 9, September 1993, pp. 1458-1468.	
	✓	CHEONG, et al., "Subband Image Coding with Biorthogonal Wavelets", <u>IEICE Trans. Fundamentals</u> , Vol. E75-A., No. 7, July 1992, pp. 871-881.	
	✓	CHRYSAFIS, et al., "An Algorith for Low Memory Wavelet Image Compression", IEEE 0-7803-5467-2/99, pg. 354-358.	
	✓	CHRYSAFIS, et al., "Line Based Reduced Memory, Wavelet Image Compression," <u>Data Compression Conference, 1998, DCC '98, Proceedings Snowbird, UT, March 1998</u> , pgs. 398-407.	
	✓	CHUI, et al., "Wavelets on a Bounded Interval", <u>Numerical Methods of Approximation Theory</u> , Vol. 9, 1992, pg. 53-75.	
	✓	CROCHIERE, et al., "Digital Coding of Speech in Sub-bands", 1976, <u>American Telephone and Telegraph Company, The Bell System Technical Journal</u> , Vol. 55, No. 8, October 1976, p. 1069-1085.	
	✓	DENK, et al., "Architectures for Lattice Structure Based Orthonormal Discrete Wavelet Transforms", <u>IEEE</u> , 1994, pp. 259-270.	
	✓	DESHPANDE, et al., "HTTP Streaming of JPEG2000 Images", <u>IEEE</u> , 2001, pp.15-19.	
	✓	Dutch Search Report, 133082, 11/26/96.	
	✓	ESTEBAN, et al., "1977 IEEE International Conference on Acoustics, Speech & Signal Processing", "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", p. 191-195.	
	✓	French Search Report, FR9511023, 11/26/96.	
	✓	French Search Report, FR9511024, 11/26/96.	
	✓	German Search Report, Dated March 21, 1997, 3 pages.	
WEN	✓	GHARAVI, et al., "Proceedings: ICASSP 87", 1987 <u>International Conference on Acoustics, Speech, and Signal Processing</u> , April 6, 7, 8, 9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", p. 2384-2387.	

WENPENG CHEN

PRIMARY EXAMINER

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Application Number 09/801,360

Filing Date 03/06/2001

First Named Inventor: Edward L. Schwartz

Art Unit 2624

Examiner Name Wenpeng Chen

APR 19 2004

Attorney Docket Number 074451.P127D4

NON PATENT LITERATURE DOCUMENTS

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Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
WEN	✓	GHARAVI, et al., "Sub-band Coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing, 1986, p. 51-61.	✓
	✓	GORDON, BENJAMIN M., et al., "A 1.2 mW Video-Rate 2-D Color Subband Decoder", IEEE Journal of Solid-State Circuits, IEEE Inc. New York, Vol. 30, No. 12, Dec. 1, 1995, pgs. 1510-1516.	✓
	✓	HAUF, et al., "The FlashPix™ Image File Format", The Fourth Color Imaging Conference: Color Science, Systems and Application, 1996, pp. 234-238.	✓
	✓	HOWARD, et al., "Fast and Efficient Lossless Image Compression", IEEE, 1993, pp. 351-360.	✓
	✓	Information Technology - JPEG 2000 Image Coding System - Part 1: Core Coding System, ISO/IEC 15444-1, 12/15/2000, pg. 5, 14, 22.	✓
	✓	International Search Report for Application No.: GB 9518298.6, dated 8. November 1995.	✓
	✓	JPEG 2000 Part 1 Final Committee Draft Version 1.0, Image Compression Standard described in ISO/IEC 1/SC 29/WG 1 N1646, 16 March 2000.	✓
	✓	KOMATSU, et al., "Reversible Subband Coding of Images", SPIE Vol. 2501, pp. 676-648.	✓
	✓	LANGDON, JR., "Sunset: A Hardware-Oriented Algorithm for Lossless Compression of Gray Scale Images", SPIE Vol. 1444, Image Capture, Formatting, and Display, 1991, pp. 272-282.	✓
	✓	LE GALL, et al., "Sub-band coding of Digital Images Using Symmetric Short Kernel Filters and Arithmetic Coding Techniques", 1988, International Conference on Acoustics, Speech and Signal Processing, pp. 761-764.	✓
	✓	LEWIS, et al., "Image Compression Using the 2-D Wavelet Transform", IEEE Transactions on Image Processing, Vol. 1, No. 2, April 1992, pp. 244-250.	✓
	✓	LUX, P., "A Novel Set of Closed Orthogonal Functions for Picture Coding", 1977, pp. 267-274.	✓
	✓	MARCELLIN, et al., "An Overview of JPEG-2000", Proceedings. DCC 2000 Snowbird, UT, USA, March 28-30, 2000, pp. 523-541, XP010377392.	✓
	✓	MENG, TERESA H., "A Wireless Portable Video-on-Demand System," VLSI Design, 1998, Proceedings Eleventh International Conference on Chennai, India 407, Jan. 1998, California, pgs. 4-9.	✓
	✓	OHTA, et al., "Wavelet Picture Coding with Transform Coding Approach", July 1992, No. 7, pp. 776-784.	✓
	✓	PADMANABHAN, et al., "Feedback-Based Orthogonal Digital Filters", IEEE Transactions on Circuits and Systems, 8/93, No. 8, pp. 512-525.	✓
	✓	POLLARA et al., "Rate-distortion Efficiency of Subband Coding with Integer Coefficient Filters", 7/1994, pg. 419, Information Theory, 1994, IEEE,	✓
	✓	REEVES, et al: "Multiscale-Based Image Enhancement", Electrical and Computer Engineering, 1997. Engineering Innovation: Voyage of Discovery. IEEE 1997 Canadian Conference on St. Johns, NFLD., Canada May 25-28, 1997, New York, NY. (pgs. 500-503), XP010235053.	✓
	✓	REUSENS, "New Results in Subband/Wavelet Image Coding", 5/1993, pg. 381-385.	✓
WEN	✓	SAID, et al., "Image Compression Using the Spatial-Orientation Tree", IEEE, 1993, pp. 279-282.	✓
WENPENG CHEN	✓	SAID, et al., "Reversible Image Compression Via Multiresolution representation and Predictive Coding", 8/11/93, pp. 664-674.	✓

PRIMARY EXAMINER

Based on Form PTO/SB/088 (08-03) as modified by BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP on 09/10/03.

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

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Application Number	09/801,360
Filing Date	03/06/2001
First Named Inventor:	Edward L. Schwartz
Art Unit	2624
Examiner Name	Wenpeng Chen

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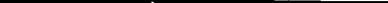
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
cur	1	SHAH, et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.	-
	1	SHAPIRO, J. M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.	-
	1	SHAPIRO, J. M., "Embedded Image Coding Using Zerotrees of Wavelet Coefficients", <u>IEEE Transactions on Signal Processing</u> , 12/93, No. 12, pp. 3445-3462.	-
	1	SMITH, et al., "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol ASSP-34, No. 3, June 1986, pg. 434-441.	-
	1	STOFFEL, et al: "A Survey Of Electronic Techniques For Pictorial Image Reproduction," <u>IEEE Transactions On Communications</u> , vol. COM-29, no. 12, December 1981, pp. 1898-1925, XP000560531 IEEE, New York (US).	-
	1	SZU, et al., "Image Wavelet Transforms Implemented by Discrete Wavelet Chips", <u>Optical Engineering</u> , July 1994, Vol. 33, No. 7, pp.2310-2325.	-
	1	VETTERLI, Martin, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing</u> 10 (1986), pg. 219-244.	-
	1	VETTERLI, Martin, "Multi-Dimensional Sub-band Coding: Some Theory and Algorithms", <u>Signal Processing</u> 6 (1984) pg. 97-112.	-
	1	VILLASENOR, et al., "Filter Evaluation and Selection in Wavelet Image Compression", <u>IEEE</u> , 1994, pp. 351-360.	-
	1	WESTERNICK, et al., "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", p. 1378-1381.	-
	1	WOODS, "Subband Image Coding", 1991, pages 101-108, 163-167, and 180-189.	-
	1	WOODS, et al., "Subband Coding of Images", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. 1 ASSP-34, No. 5, October 1986, pp. 1278-1288.	-
	1	WOODS, et al., "Sub-band coding of Images", Proceedings ICASSP 86, Tokyo, Japan, April 1986, p. 1005-1008.	-
	1	WU, et al., "New Compression Paradigms in JPEG2000", <u>Applications of Digital Image Processing XXIII</u> , San Diego, CA USA, July 31-Aug 3, 2000, vol. 4115, pp. 418-429, XP008013391, Proceedings of the DPIE - The International Society for Optical Engineering, 2000, SPIE-Int. Soc. Opt. Eng., USA.	-
cur	1	XIONG, et al., "Joint Optimization of Scalar and Tree-structured Quantization of Wavelet Image Decompositions", 01/11/93, pp. 891-895.	-

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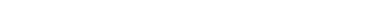
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